ing to at least one member of the Ceramic Society, and were somewhat carpingly criticised by Mr. Bernard Moore, a representative of the manufacturers on the late Departmental Committee. How Mr. Thomason effectually disposed of Mr. Moore in the course of the subsequent discussion, will be evident to any unprejudiced reader.

It is not to be expected that in such a journal as we are noticing there would be much reading *pour rire*. But in the concluding paper, which tells of a visit paid by the society to a white-lead works, where the members seem to have been most hospitably entertained by the proprietors, there is a very distinct flavour of comedy. After the luncheon, one of the senior members of the party made an attempt to express the gratitude of the society to their quondam hosts. Unfortunately the speaker had evidently been much perturbed by the sight of a lavatory basin marked "leadless glaze," and this untoward circumstance, combined with the influence of "a sumptuous table" from which the party "had almost succeeded in abolishing that 'dangerous element,' water," led him to make an ill-mannered and vituperative attack upon what he was pleased to call "a band of faddists who had little better with which to occupy their meddlesome minds" than to bring down upon the trade "a perfect plague of inspections, committees, arbitrations, and commissions." But the orator took heart of grace. He did not despair "so long as they had such friends as *Mr. Bernard Shaw* on the Lead Commission." Mr. Shaw is as ubiquitous as King Charles's head, but it is a little hard on him to confound him with Mr. Bernard Moore, with whom he has little in common. The sorry thing is that the silly speech reflects the attitude of a not inconsiderable section of the manufacturers to what is a great and crying evil in their industry.

AN INSTITUTE OF HUMAN PALAEONTOLOGY.

THE Prince of Monaco, as is well known, is a scientific man of high attainments, more especially in the sphere of oceanography. His own researches and those conducted under his auspices have been of first importance. A short time ago an account was given in these columns of the beautiful and well-equipped Museum of Oceanography which he erected at Monaco, and in last week's NATURE (p. 379) mention was made of the Oceanographical Institute founded and endowed in Paris by the Prince. As stated in another column, the institute was inaugurated on Monday, January 23, and it is hoped to give an account next week of the opening.

In 1872 M. Émile Rivière discovered the first Palæolithic skeletons of the Baoussé-Roussé caves ("The Red Caves") or Grimaldi caves, as it was decided they should be called at the International Congress of Anthropology and Prehistoric Archæology at Monaco in 1906. Later investigations revealed fresh remains, and the Prince himself in 1907 discovered the fourth grave, that of the two famous "Negroids." The Prince took great interest in these important discoveries, and generously assisted in the work which was mainly conducted by the Canon de Villeneuve, Profs. Boule, Verneau, and Cartailhac. A great deal has been written on these finds in various journals, and the official reports have been published by the Prince in two volumes; he has also established a Museum of Archæology at Monaco. The Prince was so much impressed by the wonderful mural engravings and frescoes of Palæolithic age which adorn so many caves in central and south France and north Italy that he commissioned Dr. Émile Cartailhac and l'Abbé H. Breuil to make a thorough investigation of them, which, with his customary munificence, will be published in a series of sumptuous monographs, of which the first "La Caverne d'Altamira à Santillanc pres Santander (Espagne)," has recently appeared. In the current number of *l'Anthropologie* (tome xxi., p. 725), it is stated that the Prince has decided to found in Paris an institute of human palæontology. In a letter to the Minister of Instruction announcing his decision he says that he has come to feel that greater prominence should be given to the study of the mystery which shrouds the origin of mankind, and that a methodical basis of archæological investigation is required. "Et je pensais que la philosophie et la morale des sociétés humaines seraient moins incertaines devant l'histoire des générations, écrite avec leur propre poussière." Having seen that oceanography was fittingly domiciled in Paris and Monaco, he gave some attention to the requirements of human palæontology.

The Prince goes on to state his intention of founding in Paris a centre for the pursuit of studies based on systematic excavation. The site for the institution has been selected, and the staff and a financial board of management appointed. The munificent founder adds that he has endowed the "Institut de Paléontologie humaine" with the sum of 1,600,000 francs, and proposes to make over his collections to it conditionally. The Prince, desirous of securing the most favourable terms of existence for this foundation, begs the Government to recognise its value and approve its statutes. A. C. H.

NOTES.

THE death of Sir Francis Galton at Grayshott House, near Haslemere, on January 17, marks another link broken with the greater leaders of nineteenth-century science. Sir Francis passed away quietly after only a few days' illness, clear in mind, and able within a few hours of his death to question his physician humorously as to the statistics available for the reputed action of strychnine as a drug. By his own desire his body was interred at Clavendon, near Warwick, a peaceful country churchyard, close to the house which had once been the home of his mother (Violetta Darwin), and still remains a spot with much of artistic interest to those who value the family history of a noteworthy scientific stock. The funeral took place an Saturday, January 21, the Master of Trinity College (representing the University of Cambridge and the college) and the vicar of Clavendon taking the service. Among the relatives and friends present were Miss E. Biggs, Mr. and Mrs. E. G. Wheler, Father Charles Galton, S.J., Major Hubert Galton, Miss Violet Galton, Mrs. Moilliet, Major Guy Lethbridge, Mr. Geoffrey Butler, Mr. A. F. G. Butler, Charles Galton Darwin, Miss A. Jones, and Prof. K. Pearson. The Royal Society was represented by Sir George Darwin and Mr. William Bateson, the former also representing the Royal Meteorological Society; Prof. A. Dendy represented the University of London and King's College; Major Leonard Darwin, the Royal Geographical Society; Dr. Charles Chree, the Kew Observatory; and Dr. David Heron, the Galton Eugenics Laboratory. We hope next week to publish some account of Sir Francis Galton's life and work.

THE two principal candidates for the vacant seat in the Paris Academy of Sciences caused by the death of M. Gernez were Mme. Curie and Prof. E. Branly. At the meeting of the academy on Monday, January 23, Prof. Branly was elected to the vacancy by the narrow majority of two votes. In the first ballot he received 29 votes against 28 given to Mme. Curie, and in the second 30

votes were given to him, while Mme. Curie received the same number as before. We congratulate Mme. Curie upon the substantial support she secured, and trust that before long her claims to a seat in the academy will receive their rightful recognition. The narrow margin by which she lost election on Monday may, we suppose, be taken to mean that the academy is about equally divided as to the eligibility of women for membership, and that Mme. Curie may expect to be elected on a future occasion. As scientific work must ultimately be judged by its merit, and not by the nationality or sex of its author, we believe that the opposition to the election of women into scientific societies will soon be seen to be unjust and detrimental to the progress of natural knowledge. By no pedantic reasoning can the rejection of a candidate for membership of a scientific society be justified if the work done places the candidate in the leading position among other competitors. Science knows no nationality, and should recognise no distinction of sex, colour, or creed among those who are contributing to its advancement. Believing that this is the conclusion to which consideration of the question must inevitably lead, we have confidence that the doors of all scientific societies will eventually be open to women on equal terms with men.

THE inauguration of L'Institut Océanographique de Paris took place on Monday evening, January 23, in the presence of the President of the Republic, M. Fallières, and a distinguished gathering, presided over by his Serene Highness the Prince of Monaco as president of the council of administration. Among those present were Prince and Princess George of Greece, Prince Louis of Monaco, Prince Roland Bonaparte, ex-President Loubet, the members of the Government, Ambassadors and Ministers Plenipotentiary of the foreign Powers, and the members of the Conseil d'Administration and Comité de Perfectionnement, including, among others, Dr. Paul Reynard, director of the institute; Dr. Jules Richard, director of the museum at Monaco; Prof. Chun, of Leipzig; Prof. Hergesell, of Strassburg; M. Thoulet, of Nancy; Sir John Murray, K.C.B., F.R.S.; Mr. J. Y. Buchanan, F.R.S.; and Dr. W. S. Bruce. Short addresses were delivered by the Prince of Monaco; M. Maurice Faure, Minister of Public Instruction and Fine Arts; M. Armand Gautier, president of, and in the name of, the Academy of Sciences; M. Liard, vice-rector of, and in the name of, the University of Paris; and M. Perrier, director of the Museum d'Histoire naturelle. M. Henri Bourée, *aide-de-camp* to the Prince of Monaco, also showed some excellent lantern illustrations and kinematograph views of the Prince's oceanographical investigations on board the *Princesse Alice*. After the formal proceedings, the assembled company proceeded to inspect the institute, an account of which, with its aims and object, will appear in a subsequent issue.

SIR JOSEPH LARMOR, F.R.S., Lucasian Professor of Mathematics at Cambridge and secretary of the Royal Society, has accepted the invitation of a meeting of the Unionist Party to become the Unionist candidate for the vacancy in the Parliamentary representation of Cambridge University. The prospect which this selection offers of including among the members of the House of Commons a man of distinguished eminence in the scientific world, is especially gratifying, in view of the necessity of keeping before the Government and the legislature the need for a general adoption of the methods of science in the affairs of the Empire. It is refreshing to find the value of scientific progress given prominence in an election address. Sir Joseph refers in his address to the progress of scientific knowledge during the last half-century, and to the part which Cambridge has played in promoting the advancement of this newer learning. He adds:—"But modern scientific discovery advances with accumulated force: better organisation and knowledge, in order to take full advantage of the resources that are available for this country, is still one of our foremost problems in the face of the competition of other nations; and our University is destined for an even wider sphere of work and influence than has fallen to us in the past. It should be our aim to supply leaders of industry who possess not only special attainments, but also that temperament of scientific inquiry which exalts industrial pursuits and is the most potent influence for their progress."

ACCORDING to a statement issued to the Press by Mr. William Willett, the originator of the so-called Daylight Saving Bill, the Home Secretary, Mr. Winston Churchill, "cannot conceive of any argument now which would cause him to doubt the wisdom of passing the Daylight Bill into law." Mr. Churchill is therefore prepared to make a speech in favour of the Bill when it comes again before the House of Commons. He considers that as agriculturists form only about eight per cent. of the population, their objections may be disregarded, "in order to bring within the reach of the other ninety per cent. of the population the blessings of sunlight and fresh air in their leisure hours." Mr. Churchill is, in fact, prepared to support a measure which will convert Greenwich time into German time at stated intervals, not because he has taken competent opinion as to the consequences of such an Act, but because he thinks a majority desires it. In the building and engineering trades, and in the Government's own dockyards, the working hours are already adjusted to the seasons, without legislative interference, so that the suggestion that agriculturists are the only people who do not want the Bill is altogether misleading. The daylight effects of the difference in latitude between London and Edinburgh are apparently not to be considered in these days of hasty and unnecessary legislation. Consideration of these effects would show at once that North Britain should be excluded from the provisions of the Bill. The promoters of the Bill refer to the advantages which would be obtained by altering the hours of work at different seasons of the year according to those of daylight. But it does not seem to occur to them that all the advantages could be secured in a much simpler way without the indescribable confusion and inconvenience which would be caused by frequent interference with clock-time. We believe that if the measure which Mr. Willett persistently puts forward is ever put upon the statute book, it will make us the laughing-stock of the civilised world. Unable to change our customs, we are to deceive ourselves into doing so by moving the hands of clocks in months prescribed by Act of Parliament. Such methods may be appropriate for lodging-house servants, but they are unworthy of the dignity of a great nation. It is peculiarly unfortunate that a Cabinet Minister should permit his name to be used in connection with such a proposal at the present time, seeing that a Bill to make Paris official time coincide with Greenwich time has been approved by the French Chamber of Deputies, the Senate Committee and the Cabinet, and will in all probability become law. We cannot believe, in the face of such facts, that Parliament will entertain seriously the proposed periodic change of our time-standard which Mr. Churchill is said to regard with favour.

THE concluding part (No. 10) of last year's volume of the *Kew Bulletin* contains identifications of new Lauraceæ

by Mr. J. S. Gamble, new orchids by Mr. R. A. Rolfe, and a new genus of Leguminosæ, Leptoderris, by Mr. S. T. Dunn. The new genus is practically a segregate from Derris, which it resembles in fruit, and comprises fourteen species, all derived from tropical Africa. An article by Mr. W. J. Bean provides a fourth set of garden notes on new trees and shrubs. An Alpine variety of *Erica arborea* is noted for its hardiness. Chinese introductions include *Acer griseum*, a striking trifoliate maple, *Berberis parvifolia*, a distinct species, and *Sarcococca ruscifolia*, a euphorbiaceous evergreen with habit recalling Butcher's broom. Two illustrations depict *Fothergilla major*, an American shrub highly decorative when in flower, and *Pistacia chinensis*.

THE starting of the Australian Antarctic Expedition seems now assured by the subsidies promised by the Australian Association for the Advancement of Science. The expedition will be under the command of Dr. Mawson, and it will enter the Antarctic field which now promises the most useful results. Many attempts have been made to discredit the existence of Wilkes Land, and it is obvious that Wilkes reported land farther to the north than it exists; nevertheless, his narrative offers convincing evidence that his expedition met land in that part of the Antarctic region. The Shackleton expedition has proved the extension of the land further west from Cape Adair than any other expedition, and Dr. Mawson proposes to follow this coast-line further to the west, which was one of the unfulfilled parts of the programme of the *Discovery* expedition. The German Antarctic Expedition, under Prof. von Drygalski, established the existence of continental land south of Kerguelen. No accessible part of Antarctica offers such promising results as that selected by Dr. Mawson. The development of wireless telegraphy has already led to the suggested establishment of an Australian meteorological station on that part of the Antarctic coast, and this observatory may be hoped for ultimately.

FOREIGN newspapers announce several losses that various scientific institutions have just sustained by the death of members on their respective staffs. Foremost among these is M. Gustave Leveau, by whose death the Paris Observatory loses its oldest official, who for more than half a century participated in its work and shared its renown. He had served under Le Verrier, Delaunay, Mouchez, Tisserand, Lœwy, and Baillaud, a long list recalling the various changes in the direction of activity pursued at the national observatory. M. Leveau, who rendered important services in various departments of celestial mechanics, will be best remembered for his researches into the motion of the comet of D'Arrest, the perturbations of which he regularly calculated, and at each return prepared an ephemeris. He belonged to the school of Le Verrier, and his tables of Vesta and other researches show the effect of his master's influence. Notwithstanding his mathematical work, he gave assiduous attention to the routine of the observatory, taking part mainly in the meridian observations. The director of the Leipzig Observatory announces the death of F. W. Hermann Leppig, who since 1867 has worked strenuously to forward the interests of that institution. The work of the deceased astronomer was mainly confined to meridian observations, time distribution, and in the meteorological service. The death of M. Rozé, astronomical lecturer at the Ecole Polytechnique and professor of mathematics in the Ecole de physique et chimie, is also announced. Since 1859 he had been attached to the Ecole Polytechnique, and for more than forty years had taken part in the tutorial work.

THE conference on sleeping sickness recently held at the Foreign Office was convened, Reuter's Agency learns, by the British Government as a result of representations made of the danger of the spread of sleeping sickness in consequence of the construction of the Rhodesia-Katanga Railway, which runs from the north of Broken Hill to the Congo frontier and beyond. The delegates to the conference were M. Melot, representing the Belgian Government, Dr. van Campenhout, of the Colonial Office in Brussels, Dr. Sheffield Neave, representing the Rhodesia-Katanga Railway, Dr. Aylmer May, representing the Chartered Company, Dr. Bagshawe, of the Sleeping Sickness Bureau, and representatives of the British Foreign and Colonial Offices. As the result of its deliberations, the conference concluded, with regard to the necessary precautions in the case of new railway extensions, that it is essential that the route of these lines should be inspected for *Glossina palpalis*, that maps of the fly areas be prepared, that railways should cross the fly belt at the narrowest points and not follow them, that there shall be no station, buildings, or stopping-places in the *G. palpalis* area, and that labourers on the railways should be recruited under such condition as to avoid infection. During the working of railways, it is recommended that there shall be constant supervision and inspection, that passenger carriages, trucks, &c., shall, so far as possible, have openings covered with fly-proof gauze, and that as *G. palpalis* probably does not exist south of the Congo-Zambezi watershed, the Rhodesia-Katanga Railway shall be worked in two sections with the view of avoiding the possibility of carrying the fly from one area to another.

MR. C. B. HOLMAN-HUNT, curator of the Selangor Museum, has been appointed assistant entomologist in the agricultural department of the Federated Malay States.

WE learn from the *Revue scientifique* that Baron Reinach has provided the Frankfort Physical Society with the funds necessary to establish a seismological observatory on the Feldberg, in the Taunus range. Dr. F. Linke will be the director of the observatory.

THE Belgian Royal Academy of Sciences, Letters, and Arts has awarded to Dr. L. A. Bauer the Charles Lagrange Prize for the period 1905–8, of 1200 francs, on account of his various researches in terrestrial magnetism. The academy has also awarded the decennial prize of 5000 francs for researches in physics and chemistry to M. Van der Mensbrugghe, for his work on the molecular physics of liquids.

ACCORDING to the *Revue scientifique*, the Krupp Society has given Prof. Emil Wiechert, of the University of Göttingen, 10,000 marks to enable him to conduct experiments in aërodynamics; and also 6000 marks to Prof. Leopold Ambronn, of the same university, for the construction of a new photographic apparatus.

THE Geological Society of London will this year award its medals and funds as follows:—Wollaston medal, Prof. Waldemar C. Brögger; Murchison medal, Mr. R. H. Tiddeman; Lyell medals, Dr. F. A. Bather and Dr. A. W. Rowe; Bigsby medal, Dr. O. Abel; Wollaston fund, Prof. O. T. Jones; Murchison fund, Mr. E. S. Cobbold; and the Lyell fund, Prof. C. G. Cullis and Mr. J. F. N. Green.

THE second annual Simple Life and Healthy Food Conference and Exhibition will be held in the Caxton Hall, Westminster, on March 21–24. The objects of the conference and exhibition are to simplify modern life, to introduce into homes healthy food and hygienic decorations, to teach rational physical culture, and to inculcate a love of simple and beautiful architecture.

ANNOUNCEMENT is made of another gift of 2,000,000*l.* presented by Mr. Carnegie to the Carnegie Institution at Washington. It is stated that Mr. Carnegie's total gifts to that foundation amount to 5,000,000*l.*, and his total benefactions to nearly 40,000,000*l.* The gift from him is also announced of a new telescope, with a 100-inch lens, for the observatory on Mount Wilson, California.

AT a meeting of the executive committee of the British Science Guild, the question of the annual dinner was considered in connection with the visit of the Colonial Premiers for the Imperial Conference of the Colonial Premiers. It was stated that the report on the synchronisation of clocks had given rise to a very wide discussion by the newspapers and Press. A committee was appointed to deal with the question of the prize essay upon the best way of carrying on the struggle for existence and securing the survival of the fittest in national affairs.

THE announcement has been made of the discovery of the ancient fossil Archæocyathus in material collected in Antarctica by the Shackleton expedition. The identification was made some months ago by Dr. Griffith Taylor, who is the author of a monograph on the Archæocyathineæ of South Australia, and is a member of the present British Antarctic Expedition. As Archæocyathus was a marine animal, it, of course, does not supply any evidence bearing on the presumed land connection between Australia and Antarctica. The evidence for that hypothesis is based on the distribution of land animals in the southern hemisphere and on tectonic evidence.

ACCORDING to a Reuter message from San Francisco, Mr. Eugene Ely succeeded, on January 18, in an attempt to fly in a Curtis biplane from Selfridge Field, twelve miles south of San Francisco, and to land on the deck of the cruiser *Pennsylvania*, lying twelve miles from the coast. Shortly afterwards he returned in his aëroplane to the starting point. The flight was made close to the water, and the aëroplane approached the cruiser's bows. Mr. Ely flew past the ship for a distance of about a hundred yards, and then circled back, rising slowly, and finally settled lightly. The flight occupied sixteen minutes going and fifteen minutes returning.

AT the Royal College of Surgeons on February 1 Dr. F. W. Edridge-Green will deliver the first of two lectures on "Colour-vision and Colour-blindness." The second lecture will be given on February 3. Two lectures will be delivered by Prof. W. d'Este Emery on "The Immunity of Reaction in Relation to Surgical Diagnosis" on February 6 and 8, and on February 10 Prof. Benjamin Moore will give one lecture on new views on the chemical composition and mode of formation of renal calculi, and the metabolism of calcium in gout. Prof. G. Elliot Smith, F.R.S., is to give three lectures on "The History of Mummification" on February 13, 15, and 17. The conservator of the college museum, Prof. Arthur Keith, will deliver lectures on "The Anthropology of Ancient British Races" on February 20, 22, 24, and March 1 and 3.

A CONTRACTOR employed by the Okehampton Rural District Council for the repair of roads recently removed stones from an ancient monument, known as King's Oven. Attention having been directed to this action, the Council, while admitting that the contractor should not have removed the stones, suggested that the Duchy of Cornwall should bear the cost of restoring the stones. The Secretary and Keeper of Records of the Duchy has informed the District Council that in future permission to take stone must be obtained before it is used for road mending, and that the Duchy counts upon the support and assistance of the local authorities in the protection and preservation of ancient remains. The District Council has, we are glad to know, decided to take steps to replace the stones.

THE annual general meeting of the Royal Meteorological Society was held on January 18. After the report of the council had been read, the president, Mr. H. Mellish, said that the completion of the third decade since the society undertook the collection of climatological observations suggested that the moment was opportune for taking stock of the data which had been collected in the British Isles, and of the progress which has been made in reducing and discussing them; he therefore devoted his address to a consideration of the present position of British climatology. The following officers were elected for the ensuing year:—*President*, Dr. H. N. Dickson; *vice-presidents*, F. Druce, H. Mellish, R. G. K. Lempfert, Colonel H. E. Rawson, C.B.; *treasurer*, Dr. C. Theodore Williams; *secretaries*, F. C. Bayard, Commander W. F. Caborne, C.B.; *foreign secretary*, Dr. R. H. Scott, F.R.S.

THE *Northern Whig* for January 19 contains a full report of a meeting held by the Belfast Naturalists' Field Club to commemorate the life-work of the late Samuel Alexander Stewart. The Rev. C. H. Waddell, Mr. R. Lloyd Praeger, and the president of the club, Mr. R. J. Welch, dwelt on various aspects of Stewart's career. Mr. Waddell and Mr. Praeger have also contributed sympathetic notices, accompanied by a bibliography and a charmingly characteristic portrait, to the *Irish Naturalist* for October, 1910. Belfast is justly proud of having numbered Stewart among her citizens for more than seventy years. It is one of the ironies of fate that his death, at the age of eighty-four, was caused by a street accident, but he had already retired from his post at the museum of the Belfast Natural History Society. His career was outlined in NATURE for June 30, 1910, and the recent meeting shows that the impression made by the energy and temperament of the man will not be lost among naturalists in Ireland. Those who knew his welcoming smile, and who discussed with him questions of botany or geology, felt that they were in the presence of a mind as beautiful as the open-air studies to which he pointed out the way.

PROCEEDING upon the reports of three committees and a Royal Commission, Mr. J. C. Medd presents in the *Quarterly Review* (January) a rational criticism of ways and means with reference to the extension of forestry areas and improved methods of cultivation in the British Isles. As examples of small beginnings, allusion is made to the purchase of the Inverliever estate in Argyllshire, of a forestry station at Avondale, and of estates at Aghrane, Dundrum, and other localities in Ireland. In common with most critics, Mr. Medd comments upon the failure of the commission to consider a scheme of cooperation between the State and private owners, and instances a number of advantages that would attend such an arrangement; in this connection he mentions approvingly the scheme of copartnership advocated by Lord Lovat. With regard to difficulties in the way of an extensive general scheme, it is pointed out that it would be unwise to dis-

place remunerative sheep farms and sporting estates by prospective forests of unknown value. The author touches on the need for information with respect to cost of plantations, facilities for training woodmen, and the possibilities of turning nature-study classes in the country schools to practical advantage. Cognate to the subject of the article is the announcement, last week, of the formation of an English Forestry Association, with Lord Clinton as the first chairman, for the purpose of organising the market for English timber, encouraging its use, and assisting in the establishment of local wood industries in suitable districts.

THE annual meeting of the Entomological Society of London was held on Wednesday, January 18, when the officers and council for the forthcoming session, 1911–2, were elected. Owing, however, to the death of Mr. J. W. Tutt, the president-nominate, no successor to the outgoing president, Dr. F. A. Dixey, F.R.S., was chosen, and a special general meeting will be held later in the year for that purpose. Meanwhile, the following fellows were elected to act as officers and members of the council:—*Treasurer*, Mr. A. H. Jones; *secretaries*, Commander J. J. Walker and (in place of Mr. H. Rowland-Brown, who resigns after eleven years' service) the Rev. G. Wheeler; *librarian*, Mr. G. C. Champion; *other members of the council*, Mr. R. Adkin, Mr. G. T. Bethune Baker, Prof. T. Hudson Beare, Dr. M. Burr, Dr. F. A. Dixey, F.R.S., Mr. H. St. J. Donisthorpe, Mr. J. H. Durrant, Prof. Selwyn Image, Dr. K. Jordan, Mr. A. Sich, Mr. J. R. le B. Tomlin, and Mr. H. J. Turner. The president, in the course of his address, dealt with certain problems of general biology on which special light had been thrown by entomological study, notably the demonstration that permanent races, differing from the parent stock, could be produced by artificial interference with the germ-plasm. This had been surmised from early experiments of Weismann, followed by Standfuss and Fischer, and had now been placed beyond doubt by the careful work of Tower in America, who had also shown that the new form might stand in Mendelian relation with the stock from which it sprang. Other topics touched upon in the address were the psychophysical character of the material presented to the operation of natural selection, a point particularly emphasised by Prof. Mark Baldwin, and, in connection with this, the special interest attaching to the communities of the social Hymenoptera, where the group rather than the individual appeared as the unit of selection.

A FORM of treatment of wasting diseases of young children has been recently introduced by M. Quinton. It consists in the injection every second day of 10–30 c.c. of pure fresh sea water, sufficiently diluted with distilled water so that the mixture is isotonic with human blood. Considerable success is claimed for this treatment, and, according to the *Morning Post* of January 16, M. Quinton lately visited London in order to arrange for the establishment of a dispensary for the trial of his method.

WITH the December (1910) number, the *Journal of Hygiene* completes its tenth volume, and contains indexes of authors and of subjects to the ten volumes issued, in addition to several important papers. Messrs. Glenny and Walpole find that vulcanised rubber has the power of absorbing mercury biniodide and mercuric chloride from weak solutions, in some cases almost completely. Dr. Peters in an elaborate paper discusses the natural history of epidemic diarrhœa, one of the most important conclusions being that the milk supply plays little or no part in its propagation, and that boiling the milk gives no protection.

ACCORDING to a note in the *Times* last week, plague-infected rats are still being met with in Suffolk and over an extended area, and for the purpose of aiding the Local Government Board in this connection, the Lister Institute has detailed two bacteriologists for work in the district. It would be well if the authorities followed the example of the United States Government in its campaign against the ground squirrels in California as described by Surgeon McCoy in the December (1910) number of the *Journal of Hygiene* (x., No. 4, p. 589). The squirrels are infected with plague, and during 1909–10 150,000 of the rodents were examined. The necessity for investigations on a large scale is apparent when it is stated that in one county more than 8000 squirrels were examined before any infection was discovered.

IN vol. xxiii., No. 4, of Notes from the Leyden Museum Dr. E. D. Van Oort describes, under the name of *Anurophasis monorthonyx*, a new genus and species of game-bird, obtained with other new birds, during the expedition of Mr. H. A. Lorentz to south-western New Guinea. The genus name relates to the apparent absence of tail feathers. It is not stated to what group the new bird is related. Dr. Horst's description in this issue of a new peripatus obtained during the same expedition has been noticed already in NATURE.

FROM a study of the local myriopods of the group Diplopoda (Chilognatha), Dr. K. W. Verhoeff, in a paper contributed to the *Abhandlungen der naturwiss. Ges. Isis* for the first half of 1910, considers himself justified in dividing Germany into three zoological provinces, from north to south, which he calls north, central, and south Germany. Central Germany is further split into two sub-provinces, from west to east, which are termed west central and east central. Details of the distributional grounds on which these divisions are based will be found in the paper, but it may be noted that the distribution of many groups of Diplopoda corresponds very closely with that of particular geological formations.

ACCORDING to an article contributed by Messrs. De Drorein de Bouville and Mercier to the *Revue générale des Sciences* for December 30, 1910, there has been a great recrudescence and expansion on the Continent during the past year of the salmon-disease known in France as furonculosis. The disease, which attacks both salmon and trout, together with a few other fishes, such as pike and carp, has been known on the Continent for about a quarter of a century, and was carefully studied at Munich in 1888 and the two following years. In June of last year the disease became more than usually prevalent, especially in Bavaria, where it made its appearance for the first time in 1909, and this recrudescence has given rise to much anxiety on the part of all connected with fresh-water fisheries. The disease, of which the symptoms are fully described in the article, is caused by the bacillus known as *Bacillus salmonicida*, but whether it was originally imported from America, or whether it be due to a pathogenetic development of a native organism, the authors leave an open question. It is noteworthy that rainbow-trout are particularly susceptible to furonculosis, which is fatal to a large percentage. This being so, the authors recommend that the practice of stocking European rivers with exotic salmonoids, which are generally in a low state of vitality, and therefore prone to take disease, should be discouraged. On the other hand, efforts should be made to restock salmon and trout streams with native stock, which is the most fitted to adapt itself to local conditions, and, further, that such fish should not be reintroduced into rivers from which they have completely dis-

appeared, as the causes which have led to the extinction are probably still active. Whether the continental *Bacillus salmonicida* is identical with the British *B. salmonis pestis*, Patterson, is not stated in the article.

THE annual volume for 1910 of the *Bulletin of Miscellaneous Information*, issued from the Royal Botanic Gardens, Kew, has now been published at the price of 4*s*. 6*d*. Attention has been directed already in these columns to the papers in separate numbers of the *Bulletin*, and it is sufficient to say here that the volume contains ten numbers, four appendices, and a complete index.

A LIST of Siamese plants compiled by Dr. C. C. Hosseus, and published in the *Beihefte zum Botanischen Centralblatt* (vol. xxvii., part ii.), represents, as the author points out, merely a contribution to the flora of Siam, inasmuch as some of the provinces are entirely unexplored. The author has received valuable help from many botanists in the identification of his specimens, and has furnished indications of the regions from which each species was obtained. The list shows a preponderance of Leguminosæ and Cyperaceæ.

THE latest part (vol. iv., No. 4) of the Records of the Botanical Survey of India is devoted to the notes contributed by Mr. I. K. Burkill with reference to a journey into Nepal. The author collected few novelties—three species of Impatiens and an Eriocaulon—which is explicable, as he traversed nearly the same route at the same season of the year that Wallich took eighty-seven years earlier. The notes relate chiefly to detailed features of the vegetation and a comparison of the sál, *Shorea robusta*, forests and flora of the hill tops in Nepal with those in Sikkim.

MR. ASKIN NICHOLAS, writing from 31 Queen Street, Melbourne, advances a curious explanation of Glacial periods of geology. He suggests that "the Glacial period corresponds with the period in which the moon lost its water. To me it seems feasible that this would be annexed by our planet by first forming a ring around it, under which *ring* would be a perpetual shadow of great width." But Mr. Nicholas's suggestion would not explain either the geographical distribution of areas of heavy glaciation or the recurrence of such glaciations. Mr. Nicholas refers in the course of his letter to the Glacial periods, and thus recognises that there have been more than one; and the last was geologically so recent that it would seem most improbable that there should have been any important change in the condition of the moon since that date. If the suggestion were valid, the moon should also have lost its water once during pre-Cambrian, in Cambrian, and Carboniferous times. Mr. Nicholas will find a discussion of the supposed causes of glaciation in Chamberlin and Salisbury's "Geology," vol. iii., 1906, pp. 424–46.

La Nature for December 17, 1910, contains a photograph of the "Spectre of the Brocken," taken some time ago by M. Th. Moureaux on the terrace of the observatory of the Pic du Midi. It shows in the centre of the corona the shadow of the operator holding up the photographic apparatus. On the summit of the peak and to the westward patches of cumulus cloud were scattered over the sky, and at times the sun shone out brightly on the rising mists. The author of the note (M. J. Loisel) states that, so far as he knows, this is the first time that the spectre has been photographed. He refers to M. Lancaster's experience at Uccle at the time of a thick fog in July, 1892, during which he saw his shadow projected by a lamp burning in a room on the second floor, and all his movements reproduced. M. Loisel remarks that it would be interesting to observe whether the phenomenon would be repeated in any thick fog, or only under special conditions.

WE have received a catalogue of physical apparatus and optical goods from Messrs. R. and J. Beck, which contains a longer list of parts of optical apparatus, *e.g.* lenses and prisms of glass or quartz, than we have seen previously in any English catalogue. It will prove of great help to those who are constructing apparatus for special purposes. The most noteworthy larger pieces of apparatus described are a lens-testing bench with all the fittings requisite for the rapid examination of spectacle lenses, and a large optic bench for interference and diffraction observations, which Messrs. Beck have made into a universal instrument by providing it with a spectrometer to fit on to one of the upright pillars, and with the lenses and polarising prisms necessary for the optical examination of crystals.

A COPY of the "Instructions of the Metropolitan Gas Referees" for the year 1911 has reached us. These instructions are practically identical with those issued last year, the only change being that the 10 cubic feet of gas burnt for the determination of the total sulphur is allowed to be burnt at a somewhat faster rate—0·62 foot per hour instead of 0·5. In the determination of the calorific value of the gas, the calorie used is now specially defined as "the amount of heat which will raise the temperature of a litre of water one degree centigrade," the temperature at which the water is measured not being stated.

MESSRS. D. APPLETON AND CO. will publish shortly a new work of travel entitled "The Big Game of Africa," by Mr. R. Tjader, who has studied very closely the characteristics of the big game which he has hunted, and paid attention to the scientific side of the subject.

OUR ASTRONOMICAL COLUMN.

METEORS IN FEBRUARY.—Mr. W. F. Denning writes:—"February is not a specially interesting one as regards meteors, but it has presented many brilliant fireballs in past years, and indications of several showers of somewhat important and active character.

"The writer has never made very extensive observations in this month, but from the data he has secured and from the paths of meteors observed by other persons he has long regarded a shower of Aurigids as the most prominent and richest stream of the period. The radiant is about at 75°+42°, and the time of visibility apparently extends from February 5 to 23, but this is uncertain. The meteors are slow and often bright.

"Observers would do useful work by watching the sky on clear February nights, when moonlight does not materially interfere. They might secure useful evidence as to the Aurigid shower, and would probably notice a few of the fireballs which commonly appear at this time of the year. The most remarkable fireball of modern times appeared on February 22, 1909.

"This year the moon will not interfere in the evening of February 22, and the paths of such meteors as are seen should be carefully registered and other details noted."

NOVA LACERTÆ.—Observations of Nova Lacertæ, made at Bergedorf on January 2, are reported by Dr. Graff in No. 4465 of the *Astronomische Nachrichten*. Two sets of comparisons with neighbouring B.D. stars gave, for the magnitude of the nova, 6·8, and its rose colour is compared with that of Nova Persei in May, 1901, being about 5·5° on Schmidt's scale of colour. Visual spectrum observations gave C and F, probably, and brightenings in the yellow and violet; strong absorptions in the orange and on the other side of F were also noted.